

**Notice of Allowability**

Application No.

10/508,990

Examiner

KATHERINE L. FERNANDEZ

Applicant(s)

BINDEFELD, HERVE

Art Unit

3768

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 9/17/07 and the supplemental amendment filed on 1/14/08.
2. ☒ The allowed claim(s) is/are 92-136.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance             |
|  | 9. <input type="checkbox"/> Other _____   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with William E. Beaumont on February 1, 2008.

3. The application has been amended as follows:

Claim 92 has been rewritten as follows:

92. An apparatus for medical screening and diagnosis by dual detection of stethoscopic and Doppler signals, comprising a sound-transmitting linking conduit connected, at one end, to a housing which at least partially forms an ear trumpet provided with a membrane, and, at the other end, to at least one earpiece for listening to a stethoscopic signal coming from the ear trumpet, wherein the housing is coupled to at least one ultrasound probe positioned with a sensing surface co-planar with said membrane to permit converging reception of ultrasonic and stethoscopic signals[, through the membrane]; and wherein the [ultrasonic] ultrasound probe is at an angle of about 30-70 degrees relative to the membrane, and is connected to a transducer processing circuit capable of supplying from a Doppler signal, an audio signal by coupling the processing circuit to a loudspeaker for stethoscopic-type listening, [an audio] and a video signal[, ] by coupling the processing circuit to [viewing] display

means, said processing circuit configured to provide converging stethoscopic-type listening and video signal viewing.

In claim 96, in line 1, the word "viewing" has been deleted and the word -- display -- inserted therefor.

In claim 97, in line 4, the words "supply a" has been deleted. The word -- a -- has been inserted after the word "provide".

In claim 98, in line 3, the word "the" (first occurrence) has been deleted and the word -- a -- has been inserted therefor.

In claim 98, in line 4, the word "the" (first occurrence) has been deleted and the word -- a -- has been inserted therefor.

In claim 99, in line 5, the word -- in -- has been inserted before the words "a case".

In claim 100, in line 2, the words "Doppler and stethoscopic" have been deleted.

In claim 103, in line 3, the word "viewing" has been deleted and the word -- display -- inserted therefor.

In claim 109, in line 2, the phrase -- further comprises means -- has been inserted after the words "ear trumpet". The word -- and -- has been inserted before the words "is provided".

In claim 113, in line 1, the word -- the -- has been inserted before the words "contact means".

In claim 119, in lines 1-2, the phrase "a turret shape being substantially cylindrical and of" has been deleted and the word -- an -- has been inserted therefor.

In claim 128, in line 2, the word "viewing" has been deleted and the word -- display -- inserted therefor.

In claim 128, in line 3, the word "demondulator" has been deleted and the word -- demodulator -- inserted therefor.

In claim 130, in line 2, the word "viewed" has been deleted and the word -- displayed -- inserted therefor.

In claim 132, in line 1, the word -- of -- has been inserted before the word "claim".

Claim 133 has been rewritten as follows:

133. A method of effecting medical screening and diagnosis, which comprises [effecting dual detection of] providing the apparatus of claim 92; positioning the apparatus on a subject; and detecting both stethoscopic and Doppler signals to effect said screening and diagnosis [using the apparatus of claim 92].

In claim 134, in lines 2-3, the phrase "wherein the apparatus is used to screen cardiovascular disease by measuring systolic pressure to establish" has been deleted and the phrase -- further comprising establishing -- has been inserted therefor.

In claim 135, in line 1, the phrase "wherein the screened cardiovascular disease is" has been deleted and the phrase -- further comprising determining whether the subject has -- has been inserted therefor.

4. The following is an examiner's statement of reasons for allowance: The prior art fails to show an apparatus for medical screening and diagnosis by dual detection of stethoscopic and Doppler signals, which comprises a housing which at least partially forms an ear trumpet provided with a membrane, wherein the housing is coupled to at

least one ultrasound probe positioned with a sensing surface co-planar with said membrane to permit converging reception of ultrasonic and stethoscopic signals; and wherein the ultrasound probe is at an angle of about 30-70 degrees relative to the membrane.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

  
ERIC F. WINAKUR  
PRIMARY EXAMINER